

Application # 09/312,922
 Amendment Dated June 17, 2004
 Reply to Office Action of December 17, 2003

AMENDMENT TO THE CLAIMS

1. This listing of claims will replace all prior versions, and listings, of claims in the application:

I. LISTING OF CLAIMS

1. (currently amended) A system for transmitting data representing a stream of video images, comprising:
 - a) a medical test device for generating the stream of video images;
 - b) a transmitter coupled to the medical test device for receiving and selectively distributing data representing the stream of video images; and
 - c) one or more remote receivers for communicating with the transmitter and configured to receive the data representing the stream of video images from the transmitter.
2. (currently amended) The system according to claim 1 wherein the transmitter further comprises a compressor configured for compressing the data representing the stream of video images, thereby forming a compressed stream of data.
3. (original) The system according to claim 2 wherein the one or more receivers further comprise a decompressor configured for returning the compressed stream of data into an uncompressed state.
4. (currently amended) The system according to claim 1 further comprising a recorder device coupled to the medical test device and configured for storing the data representing the stream of video images generated by the medical test device.
5. (original) The system according to claim 1 wherein the medical test device is one of an ultrasound, a sonogram, an echocardiogram, and an angioplastigram.

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6. (currently amended) The system according to claim 1 further comprising a network coupled between the transmitter and the one or more receivers for transporting the data representing the stream of video images.
7. (original) The system according to claim 6 wherein the network is an Internet Protocol network.
8. (canceled)
9. (canceled)
10. (canceled)
11. (canceled)
12. (canceled)
13. (canceled)
14. (canceled)
15. (canceled)
16. (canceled)
17. (canceled)
18. (canceled)
19. (canceled)
20. (canceled)
21. (canceled)
22. (canceled)
23. (currently amended) A system for allowing a user to remotely control a medical device, the system comprising:
- a) a medical device for generating a ~~plurality~~ stream of video images;
 - b) a transmitter coupled to the medical device for selectively distributing the ~~plurality~~ stream of video images; and

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- c) a remote receiver coupled to the transmitter for selectively receiving the ~~plurality stream~~ of video images and allowing the user to remotely control the medical device through the receiver,

whereby the user can see the results of the remote control commands in substantially real-time.

24. (original) The system according to claim 23 wherein the medical device is one of an ultrasound, a sonogram, an echocardiogram, and an angioplastigram.
25. (original) The system according to claim 23 wherein the remote receiver is coupled to the transmitter through a network.
26. (original) The system according to claim 25 wherein the network is an Internet Protocol network.
27. (currently amended) The system according to claim 23 wherein the user remotely controls parameters of the ~~plurality stream~~ of video images including frame rate and frame size.
28. (canceled)
29. (canceled)
30. (canceled)
31. (canceled)
32. (currently amended) The system of claim 23, said system further comprising:
- d. a robotic device coupled to said transmitter,
- wherein said transmitter is configured to control said robotic device, and
- wherein said transmitter is configured to receive control commands from said user through said remote receiver, and
- wherein said robotic device responds to said control commands in substantially real-time, and
- wherein ~~at least one of~~ said stream of video images comprises a substantially live video,

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whereby said remote receiver receives and displays said live video substantially in real-time, and

whereby the remote user can control said robotic device with control commands while viewing said live video,

whereby the remote user can perform procedures with the robotic device and the medical device with substantially real-time control and real-time visual feedback.

33. (currently amended) A system for transmitting a real-time video over a network, said system comprising:

a. a transmitter containing one or more digitized frames of a said real-time video being transmitted,

b. the network connected to said transmitter,

c. one or more remote receivers connected to said network for receiving said video from said transmitter,

wherein at least one of said receivers is configured to receive one or more control commands from a user, and

wherein said transmitter is configured to receive at least one of said control commands from said one of said receivers,

wherein said control command changes the operation of said transmitter,

whereby said user can remotely control the operation of said transmitter in substantially real-time.

34. (previously amended) The system of claim 33 wherein said control command specifies a subset of the area of said digitized frames,

wherein said transmitter selectively operates on said subset of the frame area.

35. (currently amended) The system of claim 33 wherein said transmitter further comprises a compressor which can be configured to use a plurality of video compressors compression algorithms and,

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wherein said control command allows the remote user to select or change the selection of one of the plurality of video ~~compressors~~ compression algorithms to be used by the transmitter to process said digitized frames.

36. (previously amended) The system of claim 33 wherein said control command allows the remote user to start or stop the transmission of said video.

37. (new) A system for transmitting data representing a stream of video images, comprising:

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- a) a medical test device for generating the stream of video images;
 - b) a transmitter coupled to the medical test device for receiving and selectively distributing data representing the stream of video images;
 - c) one or more remote receivers for communicating with the transmitter and configured to receive the data representing the stream of video images from the transmitter; and
 - d) a network coupled between the transmitter and the one or more receivers for transporting the data representing the stream of video images.

wherein said transmitter comprises a compressor configured for compressing the data representing the stream of video images, thereby forming a compressed stream of data, and

wherein said one or more receivers further comprise a decompressor configured for returning the compressed stream of data into an uncompressed state,

whereby the user can see stream of video images in substantially real-time.

38. (new) The system of claim 37 wherein said one or more remote receivers allow the user to remotely control the medical device through the receiver,

whereby the user can see the results of the remote control commands in substantially real-time.

39. (new) The system of claim 38, said system further comprising:

- d. a robotic device coupled to said transmitter,

wherein said transmitter is configured to control said robotic device, and

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wherein said transmitter is configured to receive control commands from said user through said remote receiver, and

wherein said robotic device responds to said control commands in substantially real-time, and

wherein said stream of video images comprises a substantially live video,

whereby said remote receiver receives and displays said live video substantially in real-time, and

whereby the remote user can control said robotic device with control commands while viewing said live video,

whereby the remote user can perform procedures with the robotic device and the medical device with substantially real-time control and real-time visual feedback.

40. (new) A system for transmitting data representing a stream of video images and control commands, comprising:

- a) a video source;
- b) a transmitter coupled to the video source for receiving and selectively distributing data representing the stream of video images;
- c) one or more remote receivers for communicating with the transmitter and configured to receive the data representing the stream of video images from the transmitter and to send data representing control commands;
- d) a data pipe coupled between the transmitter and at least one receiver for transporting the data representing the stream of video images;
- e) a control link coupled between the transmitter and at least one receiver for transporting the data representing the control commands;

wherein said transmitter comprises:

- (i) a video image capture device with associated video settings;
- (ii) a video server connected to said video image capture device and further comprising a video compressor for compressing the stream of video images, a first buffer for use by the compressor, and a

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second buffer for holding at least a portion of the compressed stream of video images,

(iii) a listener connected to the video server for making socket connections for the data pipes to said one or more receivers

(iv) a transmitter video control for receiving control commands from said one or more receivers and altering said video settings and settings of said compressor.

wherein at least one of said receivers comprises:

(v) a video client connected to said at least one of said data pipes for receiving said stream of compressed video images, said video client further comprising a decompressor and a third buffer for use by the decompressor, whereby said stream of compressed video images is decompressed and displayed to a user;

(vi) a receiver video control for receiving control commands from said user;

whereby said user can remotely control the video settings and compressor settings while viewing said stream of video images.

41. The system of claim 40, wherein said transmitter further comprises:

(vii) a video recorder connected to the video control and video server for recording the stream of video images for later playback as a recorded video; and

(viii) a recorded video transmitter for transmitting said recorded video to at least said one or more receivers via a recorded video data pipe;

wherein at least one of said receivers further comprises:

(ix) a video player connected to said recorded video data pipe and said video client and said video control whereby said recorded video is received and displayed to said user;

whereby said user can control the recording of portions of said stream of video images in one or more instances of said recorded video and can control the selection and playback of at least one of said instances of said recorded video.

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42. (new) The system of claim 41, wherein said video recorder further comprises an edit list, said edit list comprising a list of one or more segments of the recorded video, whereby specified portions of the recorded video can be selected for transmission.

43. (new) The system of claim 41, wherein said video recorder further comprises an edit list, said edit list comprising a list of one or more segments of the recorded video, whereby specified portions of the recorded video can be selected for special processing.